

## Shock-what?: Tech Basics for e-Learning

Browsers? Plug-ins? Bandwidth? Confused by all the requirements for taking a course online? Have hope! We'll dispel the cloud of technical mumbo-jumbo and give you the background you need to get started on your online learning adventure.

## Browsers

First, you want to think about your browser. Web browsers such as **Microsoft Internet Explorer** and **Netscape Communicator** enable you to find and display the text and graphics that Web pages are made of. You need a browser to see Web pages, and you need a browser to take an online course. Browser makers support the latest Web technologies, like the Shockwave or Quicktime plug-ins (see below), by continually releasing newer versions of their browsers. Generally speaking, it is a good idea to have an up-to-date version of your Web browser. The one that came with your system may not support the latest online learning technology.

You can download the latest version of Microsoft Internet Explorer from Microsoft or get Netscape Communicator at Netscape's download site. Just follow the downloading and installation directions on these pages to get your browser up-to-date and get on track to a successful e-learning experience.

## Plug-ins

Many course publishers use software plug-ins to provide features not found in a Web browser. Plug-ins are little pieces of software that work with your Web browser to accomplish this. Many plug-ins display animation, movies, or interactive multimedia. Courseware providers usually make it clear which plug-ins are required to get the most out of their courses. We also include this information in our course reviews. Most providers also give you links to free downloads of required plug-ins.

If you're going to be taking courses from many different publishers, it may make sense to load up on plug-ins ahead of time. Macromedia, maker of many popular Web content tools, offers their Shockwave, Flash, and Authorware plug-ins for free download. Macromedia plug-ins offer nifty Web animation and interactive multimedia. Apple offers their Ouicktime media player for free here. Another popular media player is RealPlayer from RealNetworks. (Be sure to click on the link for "RealPlayer 8 Basic" to get the free version of RealPlayer.) Finally, we can't forget Microsoft and their ever-present Windows Media Player. You can download the player at Microsoft's download site. (Make sure to look at which version of the Windows Media Player you need for your operating system, for example, for Windows 95 or Windows 2000.)

## Bandwidth

Plug-ins expand the capabilities of your browser and help you get the most from courses. But that comes at a price. They're more complicated, and they consume a lot of bandwidth. Bandwidth is the amount of data that can be transferred in a fixed amount of time. The smaller the amount of bandwidth available, the more time it takes to deliver the content you want. That's not a problem for simple text or images, but video and interactivity require more data, so they can take a long time if you don't have enough bandwidth. All of the fun in taking an online course evaporates if you have to wait 15 minutes for a portion of it to display. Bandwidth is usually measured in kilobits per second (Kbps) or megabits per second (Mbps). A typical Internet connection at home provides up to 56 Kbps but averages around 44 Kbps. This amount of bandwidth is adequate for some online courses but woefully inadequate for others. For example, you may use a 28.8-Kbps modem when taking a Learnlots.com course, but you need greater bandwidth to take a course from Catapult. In general, the more bandwidth you have available, the more enjoyable and rewarding your experience will be.